



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,954	09/26/2001	Steven Jerome Caruso		1578

23446 7590 08/20/2003  
MCANDREWS HELD & MALLOY, LTD  
500 WEST MADISON STREET  
SUITE 3400  
CHICAGO, IL 60661

6  
EXAMINER

BALSIS, SHAY L

ART UNIT	PAPER NUMBER
----------	--------------

1744

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/963,954

Applicant(s)

CARUSO, STEVEN JEROME

Examiner

Shay L Balsis

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 36 and 44. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 9-13 and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyawaki et al. "*Miyawaki*" (USPN 5979011).

Miyawaki teaches a dust removing apparatus comprising a primary moving surface (30) with a first portion to be in contact with a surface to be cleaned (2) and a second portion to be in contact with a secondary moving surface (32). The primary surface is comprised of standing fibers having a directional bias (figure 6). The secondary surface moves in a clockwise direction while the primary surface moves in a counter-clockwise direction. The primary and second surfaces are powered by an electric motor (MI). The apparatus also comprises a power fan implement (48) and a vacuum fan inlet (47a, 47b) for collecting the dust. The primary and the secondary surfaces move at different surface velocities, wherein the surface velocity is different

Art Unit: 1744

in its component of direction and in its component of speed. Since the primary and secondary surfaces are not connected together by means of a belt or gearing it is clear that they move independently of each other.

4. Claims 1-4, 7, 9-10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Price (USPN 3482273).

Price teaches a surface treating apparatus comprising a primary moving surface (11) with a first portion to be in contact with a surface to be cleaned (10) and a second portion to be in contact with a secondary moving surface (17). The primary surface is comprised of standing fibers having a directional bias (figure 6). The secondary surface moves in a clockwise direction while the primary surface moves in a counter-clockwise direction. The primary and second surfaces are powered by an electric motor (14).

5. Claims 1-4, 6-7 and 9-10 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Dempsey (USPN 2469636).

Dempsey teaches a cleaning apparatus comprising a primary moving surface (17) with a first portion to be in contact with a surface to be cleaned and a second portion to be in contact with a secondary moving surface (31). The primary surface is comprised of standing fibers having a directional bias (figure 3). The secondary surface moves in a clockwise direction while the primary surface moves in a counter-clockwise direction. The primary and second surfaces are powered by an electric motor (36). The apparatus also comprises a vacuum fan inlet (40) for collecting the dirt.

6. Claims 1-4, 6-7 and 9-10 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Nordeen (USPN 4426751).

Art Unit: 1744

Nordeen teaches a vacuum cleaner comprising a primary moving surface (117) with a first portion to be in contact with a surface to be cleaned and a second portion to be in contact with a secondary moving surface (116). The primary surface is comprised of standing fibers having a directional bias (figure 5). The secondary surface moves in a clockwise direction while the primary surface moves in a counter-clockwise direction. The primary and second surfaces are powered by an electric motor (20, 22). The cleaner also comprises a vacuum fan inlet (13a) for collecting the dirt.

7. Claims 1-4 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Courchene (USPN 1942204).

Courchene teaches a vacuum cleaner comprising a primary moving surface (C) with a first portion to be in contact with a surface to be cleaned and a second portion to be in contact with a secondary moving surface (60). The primary surface is comprised of standing fibers having a directional bias (figure 3). The secondary surface moves in a clockwise direction while the primary surface moves in a counter-clockwise direction.

8. Claims 1-3, 9 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuruzawa et al. "*Tsuruzawa*" (USPN 3842459).

Tsuruzawa teaches a vacuum cleaner comprising a primary moving surface (8) with a first portion to be in contact with a surface to be cleaned and a second portion to be in contact with a secondary moving surface (10). The primary surface is comprised of standing fibers having a directional bias (figure 1). The primary and the secondary surfaces move at different surface velocities, wherein the surface velocity is different in its component of direction and in its

Art Unit: 1744

component of speed. Since the primary and secondary surfaces are not connected together by means of a belt or gearing it is clear that they move independently of each other.

9. Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Gasparrini (USPN 5322015).

Gasparrini teaches a vacuum cleaner comprising a primary moving surface (28) with a first portion to be in contact with a surface (60) to be cleaned and a second portion to be in contact with a secondary moving surface (24). There is a vacuum fan inlet (58) to remove loosened lint and debris.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyawaki (USPN 5979011), Price (USPN 3482273) Dempsey (USPN 2469636), Nordeen (USPN 4426751), Courchene (USPN 1942204), Tsuruzawa (USPN 3842459) and Gasparrini (USPN 5322015) all in view of Rodowsky, Jr. et al. "*Rodowsky*" (USPN 4300262).

All the above reference teach all the essential elements of the claimed invention however, they fail to teach using an air turbine motor. Rodowski teaches a vacuum cleaner that uses an air turbine motor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an air turbine motor on all of the references because it ensures good

Art Unit: 1744

air flow with a minimum of air turbulence without unduly restricting air flow, thereby enhancing turbine efficiency (col. 2, lines 35-48).

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyawaki (USPN 5979011), Price (USPN 3482273) Dempsey (USPN 2469636), Nordeen (USPN 4426751), Courchene (USPN 1942204) and Tsuruzawa (USPN 3842459) all in view of Rodowsky, Jr. et al. "*Rodowsky*" (USPN 4300262).

All the above reference teach all the essential elements of the claimed invention however, they fail to teach using an air turbine motor. Rodowski teaches a vacuum cleaner that uses an air turbine motor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an air turbine motor on all of the references because it ensures good air flow with a minimum of air turbulence without unduly restricting air flow, thereby enhancing turbine efficiency (col. 2, lines 35-48).

13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyawaki (USPN 5979011) and Tsuruzawa (USPN 3842459) all in view of Rodowsky, Jr. et al. "*Rodowsky*" (USPN 4300262).

The above reference teach all the essential elements of the claimed invention however, they fail to teach using an air turbine motor. Rodowski teaches a vacuum cleaner that uses an air turbine motor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an air turbine motor on the above references because it ensures good air flow with a minimum of air turbulence without unduly restricting air flow, thereby enhancing turbine efficiency (col. 2, lines 35-48).

Art Unit: 1744


*Conclusion*

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 703-305-7275. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5665.

slb  
July 30, 2003

  
ROBERT J. WARDEN, SR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700